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COMMERCIAL FERTILIZERS.

By JOHN S. BURD.

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The Station publications (REPORTS AND BULLETINS), so long as available, will be sent to any citizen of the State on application.

COMMERCIAL FERTILIZERS.

By JOHN S. BURD.

The present report contains the tabulated analyses of fertilizers collected for the half-year ending June 30, 1908. During this period 250 samples of fertilizers and fertilizing materials have been received at the laboratory. Of this number 29 were sent by farmers under the two-dollar fee provision, 81 were taken by inspectors from purchasers' goods upon the request of the purchasers, and 120 were taken by inspectors from goods in the hands of agents and manufacturers. On 4 samples the analysis as reported was used as a basis of settlement by mutual agreement of buyer and seller. No guaranty was required or given with goods sold under such an agreement. Twenty samples of a miscellaneous nature, which do not come within the legal definition of a commercial fertilizer, are omitted from the tables.

Analyses of samples taken directly from goods delivered to consumers form the most desirable basis for judgment as to the character of fertilizers being sold. It has accordingly been the policy of the Fertilizer Control to increase, in so far as possible, the proportion of the so-called farmers' and purchasers' samples. The above quoted figures indicate that, during the period covered, 48 per cent of the samples collected belonged to these classes. Whereas, during the preceding half-year, these comprised only 31 per cent of the total. The attempt will be made in the future to maintain or increase the present proportion, and inspectors have instructions to take samples at the request of purchasers at every opportunity.

The following classification may be made of samples reported in this bulletin :

Complete fertilizers	103
Bone meal	15
Tankage	34
Superphosphate and potash	8
Superphosphate	17
Dried Blood	29
Nitrate of Soda	12
Sulfate of Potash	5
Muriate of Potash	1
Bat guano	5
Thomas Phosphate Powder	1
Total	230

DEFICIENCIES.

In the analyses of the above samples, the following number of deficiencies greater than allowed by law occur :

Available phosphoric acid (total when available is not guaranteed)	17
Total nitrogen	34
Potash	7
In valuation	23

These deficiencies were found in 54 samples.

The fertilizer law allows a deficiency of 0.25 per cent in nitrogen, 0.50 per cent in potash, and 1.00 per cent in available phosphoric acid.

FERTILIZER VALUATIONS.

The calculations of the commercial values of the fertilizers here reported are made on the so-called unit basis. Such calculations consist simply in multiplying the number of per cent of each ingredient by the price per unit and adding the products. The sum thus obtained is the commercial value per ton at the prices used. If it is desired to use such a calculation for determining the amount which should be paid for goods, or the rebate to which the buyer is entitled owing to the goods delivered being below the guaranty, it can only be satisfactorily done if a definite price per unit has been agreed upon between buyer and seller. But for the mere purpose of showing the relative values of goods to guaranties, it is not at all necessary that the prices adopted should be the exact market prices. Thus it is that the Fertilizer Control in attempting to show the relation between values found and values claimed, uses a schedule which is admittedly only an approximate average of market values. Owing to market fluctuations, differences in cost of delivery at different points, and other causes, the obtaining of true average market prices is an impossibility. But if the reader will bear in mind the true purpose of the valuations reported, these will have served their turn and he will not be led to assume that the Experiment Station is dictating the prices at which goods shall be sold.

SCHEDULE OF TRADE VALUES.

	<i>Phosphoric Acid.</i>	Cents. Per Pound.	Value. Per Unit.
Available (water and citrate-soluble).....		6	\$1 20
Insoluble in mixed fertilizers		2½	0 50
In fine* bone and tankage		4½	0 90
In medium* bone and tankage.....		3½	0 70
In fine* Thomas phosphate powder.....		5	1 00
In medium* Thomas phosphate powder		3	0 60
<i>Nitrogen.</i>			
In ammonia salts		18	3 60
In nitrates		17½	3 50
Organic in—			
Blood		21	4 20
Mixed fertilizers		20	4 00
Fine* bone and tankage		20½	4 10
Medium* bone and tankage.....		16	3 20
<i>Potash.</i>			
From sulfate		6	1 20
From muriate.....		5	1 00

* Fine and medium bone are separated by a sieve with 50 meshes to the inch ; fine and medium tankage by a 25-mesh sieve ; and fine and medium Thomas phosphate powder by a 100-mesh sieve.

REPORT OF ANALYSES.*

Available phosphoric acid is not determined in bone meal, tankage, and Thomas phosphate powder, unless requested. The fineness of these materials is determined, fine and medium bone being separated by a sieve of 50 meshes to the inch; tankage by a 25-mesh sieve; and Thomas phosphate powder by a 100-mesh sieve.

Nitrogen in ammonia salts will, in some cases, be found reported when nitrogen in this form is not guaranteed. In some of such cases this form of nitrogen is produced by conversion of organic nitrogen during process of manufacture, and is not to be considered a deviation from guaranty of materials used. Guanos carry more or less nitrogen in nitrates and ammonia salts, and when any appreciable quantity of guano is used the manufacturer should take into account the fact that some nitrogen will show as nitrates and ammonia salts. The failure to take this into consideration may perhaps account for the appearance of these forms of nitrogen in some samples in which only organic nitrogen was guaranteed.

The percentage of chlorin is given when it exceeds 0.50 per cent. It is a matter of only technical interest whether chlorin present is from muriate of potash, kainit, or from common salt that may be in some of the materials used. If a manufacturer uses sulfate of potash and uses a tankage with it containing a large amount of chlorin, from a practical standpoint he has lowered the grade of his fertilizer just as much as if he had used muriate of potash instead of sulfate of potash. Chlorin from all other sources is as objectionable as from muriate of potash. However, if muriate of potash is found when sulfate is guaranteed, the fact will be published.

The following abbreviations are used in the tables: Bl=blood, Bn=bone, Fs=fish, G=guano, Super=superphosphate, T=tankage.

Guaranties are entered in *italics*. Deficiencies greater than allowed by law are entered in bold type.

NOTICE CONCERNING TAGGING.

A number of cases of incomplete and defective tagging have occurred during the period covered by this report. The attention of manufacturers and dealers is especially directed to the necessity for stating in a definite manner the sources from which fertilizer ingredients are derived. Specific instances of infractions of this requirement consist in simply stating the source as "animal matter," instead of "bone, tankage," etc. Again, materials properly designated as bird guano phosphate have sometimes been called "guano," or bat guano has been called simply "guano," statements which are, to say the least, misleading and must be discontinued.

*The laboratory work in connection with these analyses was largely carried out by Mr. P. L. McCreary, to whom credit is due for his careful and conscientious work.

ANALYSES AND VALUATIONS.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
	Agricultural Chemical Works, Los Angeles, Cal.		
1631	Bat Guano	H. J. Nichols, Pomona	106.02
	Guaranteed		100.70
1706	Bat Guano	A. C. Pickett, Riverside	40.21
	Guaranteed		43.24
1547	Bat Guano and Gypsum	E. A. Moore, Redlands	48.10
	Guaranteed		45.80
1614*	Blood	Los Angeles Olive Growers' As'n, L. A.	54.44
1707*	do	A. C. Pickett, Riverside	56.83
	Guaranteed		53.30
1581	Lawn	Holland & Holland, Fresno	23.76
	Guaranteed		21.50
1537	Nitrate of Soda	G. A. Herdeg, Riverside	54.46
	Guaranteed		54.25
1699	Nitrate of Soda	F. M. Dunbar, Riverside	52.29
	Guaranteed		52.50
1709	Special	A. C. Pickett, Riverside	26.50
	Guaranteed		38.45
1469	Special Orange and Lemon	A. L. Wright Jr., Rialto	29.16
	Guaranteed		26.90
1470	Special Orange and Lemon	A. L. Wright Jr., Rialto	31.80
	Guaranteed		29.30
1532	Special Orange and Lemon	H. S. Clark, Riverside	28.92
	Guaranteed		28.45
1538	Special Orange and Lemon	G. A. Herdeg, Riverside	26.22
	Guaranteed		25.50
1544	Special Orange and Lemon	G. A. Herdeg, Riverside	25.37
	Guaranteed		26.60
1546	Special Orange and Lemon	E. A. Moore, Redlands	27.34
	Guaranteed		26.60
1555	Special Orange and Lemon	L. S. Taylor, San Dimas	29.62
	Guaranteed		29.20
1685	Special Orange and Lemon	D. B. Bailey, Rialto	25.63
	Guaranteed		22.90
1698	Special Orange and Lemon	F. M. Dunbar, Riverside	24.83
	Guaranteed		23.90
1708	Special Orange and Lemon	A. R. Ocheltree, Riverside	24.88
	Guaranteed		26.60
1615	Superphosphate	Los Angeles Olive Growers' As'n, L. A.	23.62
	Guaranteed		21.60
1467*	Tankage	A. W. Handyside, Duarte	33.48
	Guaranteed		36.54
1468*	Tankage	A. L. Wright Jr., Rialto	32.50
	Guaranteed		36.14
1545*	Tankage	E. A. Moore, Redlands	37.09
	Guaranteed		34.28
	American Agricultural Chemical Co., Los Angeles, Cal.		
1481	Bradleys Lawn	Pacific Wood & Coal Co., San Diego	29.59
1476	Bradleys Lemon Tree	do	29.50
1497	Bradleys Nursery Stock	L. V. W. Brown, Riverside	29.73
1543	Bradleys Nursery Stock	Graham, Cope Com'l Co., Redlands	28.51
1640	Bradleys Nursery Stock	Eben Boalt, Palermo	30.28
1675	Bradleys Nursery Stock	H. W. Pierce, Claremont	28.46
	Guaranteed		28.28

*1614—Some hoof.

*1468—86 per cent fine.

*1707—Some hoof.

*1545—86 per cent fine.

*1467—85 per cent fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number -----	POUNDS PER HUNDRED.												Chlorin -----
	PHOSPHORIC ACID.				NITROGEN.					POTASH.			
	Available --	Insoluble---	Total -----	Guaranteed as Derived From-----	In Nitrates--	In Ammo- nia Salts --	Organic ---	Organic Nitrogen Guaranteed as Derived From	Total -----	From Muriate --	From Sulfate ---	Total -----	
1631	8.18 3.00	0.09 3.00	8.27 6.00						22.88 23.00			3.86 3.00	
1706			3.39 3.20		2.79	1.22	5.30		9.31 9.60			1.78 1.90	
1547			6.30 5.00				10.14 10.00		10.14 10.00			2.08 1.50	
1614							13.28		13.28				
1707							13.86 13.00		13.86 13.00				
1581	4.32 5.00	5.50 5.00	9.82 10.00	Super T			3.06 2.50	Bl, Bn, T	3.06 2.50	2.99 2.50			
1537					15.56 15.50				15.56 15.50				
1699					14.94 15.00				14.94 15.00				
1709	4.14 4.00	3.36 4.00	7.50 8.00	Super, T	2.31 1.50	0.45	1.80 3.50	Bat G, Bl, Bn	4.56 5.00		2.45 2.00		
1469	9.57 9.00	2.12 1.00	11.69 10.00						3.47 3.30	3.47 3.30	2.28 2.00		
1470	9.78 9.00	2.21 1.00	11.99 10.00						3.43 3.30	3.43 3.30	4.36 4.00		
1532	3.55 4.00	4.30 4.00	7.85 8.00		2.57 1.50	0.54	2.13 3.50			5.24 5.00	2.55 2.00		
1538	3.08 4.00	4.26 4.00	7.34 8.00		1.41 1.00	0.10	1.74 2.00			3.25 3.00	6.78 6.00		
1544	4.45 5.00	2.77 3.00	7.22 8.00		1.92 1.00	0.55	1.46 3.00			3.93 4.00	3.42 3.00		
1546	5.79 6.00	4.59 3.00	10.38 9.00		1.68 1.00	0.40	1.95 3.00			4.03 4.00	2.48 2.00		
1555	8.43 9.00	3.42 1.00	11.85 10.00		2.35 1.00	0.70	1.03 3.00			4.08 4.00	2.44 2.00		
1685	4.35 3.00	5.00 6.00	9.35 9.00		1.28 1.00	0.48	1.78 2.00			3.54 3.00	3.82 4.00		
1698	5.59 5.00	4.18 5.00	9.77 10.00				2.05 2.00			2.05 2.00	6.34 6.00		
1708	4.56 5.00	3.78 3.00	8.34 8.00	Super T	2.15 1.00	0.32	1.35 3.00	Bl, Bn	3.82 4.00		2.87 3.00		
1615	19.68 18.00	0.32 0.50	20.00 18.50										
1467			19.09 13.50	Bn			4.60 6.50	Bl, Bn	4.60 6.50				
1468			19.84 13.00				4.20 6.50		4.20 6.50				
1545			15.96 13.00				6.11 6.00		6.11 6.00				
1481	9.22	2.11	11.33	All samples of com- plete fertilizer of this company Bn Super	2.42	1.15	0.65	All samples of com- plete fertilizer of this company Bl, Bn, Bat G, T	4.22		1.88		
1476	9.06	1.90	10.96		2.37	1.15	0.73		4.25		1.93		
1497	8.97	2.03	11.00		2.47	1.27	0.73		4.47		1.51		
1543	9.19	1.62	10.81		2.48	0.90	0.66		4.04		1.76		
1640	9.21	2.68	11.89		2.85	0.83	0.66		4.34		1.90		
1675	8.97	1.91	10.88		2.28	1.04	0.65		3.97		2.01		
	9.00	1.00	10.00		1.65	1.00	1.45		4.10		1.50		

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
	Armour Fertilizer Works, Los Angeles.		
1506	Blood	I. W. Freeman, Redlands	53.93
	Guaranteed		56.70
1582	Blood	G. W. Russel, Ontario	58.18
	Guaranteed		57.40
1539*	Blood	I. W. Freeman, Redlands	49.39
1641*	do	J. C. Boyd, Rialto	50.02
	Guaranteed		54.60
1499	Bone, Blood and Potash	W. T. Henderson, Riverside	36.08
1520	do	I. W. Freeman, Redlands	35.64
	Guaranteed		34.40
1521	Bone, Blood and Potash	I. W. Freeman, Redlands	33.85
1583	do	G. W. Russel, Ontario	33.90
1634	do	J. W. Corwin, Highland	34.65
1642	do	J. C. Boyd, Rialto	32.51
	Guaranteed		34.10
1500*	Bone Meal	W. T. Henderson, Riverside	29.43
	Guaranteed		27.05
1517*	Bone Meal	R. T. Murrell, Pomona	28.59
	Guaranteed		27.00
1527*	Bone Meal	L. S. Flateau, Redlands	29.69
	Guaranteed		27.06
1584*	Bone Meal	G. W. Russel, Ontario	30.15
	Guaranteed		27.50
1585*	Bone Meal	I. W. Freeman, Redlands	29.25
	Guaranteed		27.45
1622*	Bone Meal	A. Barmann, Mentone	29.48
	Guaranteed		27.05
1586	Fruit Special	Griffin-Skelly Co., Fresno	23.55
	Guaranteed		22.40
1522	Fruit and Vine	I. W. Freeman, Redlands	30.95
1644	do	Pinkham & McKevitt, Vacaville	28.72
	Guaranteed		27.80
1498	Orange Tree Manure	W. T. Henderson, Riverside	28.26
1589	do	Geo. D. Avery, Porterville	30.12
	Guaranteed		26.80
1587	Orange Tree Manure	G. W. Russel, Ontario	27.51
1588	do	J. C. Boyd, Rialto	27.61
1688	do	Fred A. Browne, Pomona	26.81
	Guaranteed		26.73
1519	Pea Special	I. W. Freeman, Redlands	20.17
	Guaranteed		22.00
1518	Special	I. W. Freeman, Redlands	35.28
	Guaranteed		33.60
1549	Special	Mrs. M. E. Wallace, Rialto	82.87
	Guaranteed		89.20
1590	Special	I. W. Freeman, Redlands	34.35
	Guaranteed		33.40
1633	Special	W. S. Corwin, Highland	41.36
	Guaranteed		41.10
1591	Special 5-8-2	G. W. Russel, Ontario	29.01
1643	do	J. C. Boyd, Rialto	28.25
	Guaranteed		28.10
1714	Sulfate of Potash	J. C. Boyd, Rialto	63.02
	Guaranteed		57.60

* 539—Some hoof.

* 1500—68% fine.

* 1527—64% fine.

* 1585—83% fine.

* 1641—Some hoof.

* 1517—69% fine.

* 1584—84% fine.

* 1622—65% fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.....	POUNDS PER HUNDRED.											Chlorine
	PHOSPHORIC ACID.				NITROGEN.				POTASH.			
	Available ..	Insoluble ..	Total	Guaranteed as Derived From	In Nitrates.	In Ammo- nia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate ..	From Sulfate ..	
1506							12.84		12.84			
1582							13.50		13.50			
1539							14.19		14.19			
1641							14.00		14.00			
1499	9.44	1.79	11.23			1.15	2.81		3.96		7.06	
1520	8.72	2.21	10.93	Bn, G, Super		1.15	2.65		3.80		7.77	1.04
	8.00	2.00	10.00			1.50	2.50	Bl, Bn, G, T	4.00		7.00	
1521	7.79	1.74	9.53		1.13	1.19	1.66		3.98		7.29	
1583	7.61	1.74	9.35		0.89	1.02	1.95		3.86		7.76	
1634	8.04	2.19	10.23		0.98	1.17	1.76		3.91		7.65	
1642	7.92	1.98	9.90	Bn, G, Super	1.12	1.00	1.39		3.51		7.45	
	8.00	2.00	10.00		1.00	1.00	2.00	Bl, Bn, G, T	4.00		7.00	
1500			24.02				2.70		2.70			
			22.00				2.50		2.50			
1517			23.10				2.69		2.69			
			22.00				2.50		2.50			
1527			23.18				2.95		2.95			
			22.00				2.50		2.50			
1584			23.78				2.81		2.81			
			22.00				2.50		2.50			
1585			23.36				2.68		2.68			
			22.00				2.50		2.50			
1622			22.86				2.96		2.96			
			22.00				2.50		2.50			
1586	7.76	2.65	10.41			0.46	1.12		1.58		5.64	
	8.00	2.00	10.00			0.50	1.00		1.50		5.00	
1522	7.78	2.17	9.95			0.82	1.33		2.15		10.21	0.66
1644	6.31	1.56	7.87			0.70	1.10		1.80		11.21	
	6.00	2.00	8.00			1.00	1.00		2.00	10.00		
1498	8.60	2.11	10.71			1.19	1.94		3.13		4.03	
1589	9.28	1.91	11.19			1.67	1.72		3.39		4.28	
	8.00	2.00	10.00			1.50	1.50		3.00		4.00	
1587	7.81	2.78	10.59		0.60	1.03	1.54		3.17		4.05	
1588	7.29	2.48	9.77		0.69	0.98	1.35		3.02		5.22	
1688	7.71	2.78	10.49		0.80	0.80	1.33		2.93		4.31	
	8.00	2.00	10.00		0.75	0.75	1.50		3.00		4.00	
1519	2.40	11.05	13.45	Bn, Super			1.55		1.55		4.63	
	6.00	6.00	12.00				1.75	Bl, Bn, T	1.75		4.00	
1518			18.40				1.95		1.95		10.63	
			17.00				2.00		2.00		10.00	
1549			9.27		9.45	7.34	2.94	Bn	19.73		3.50	
			10.00			6.00	14.00		20.00		3.00	
1590	11.26	1.82	13.08		0.63	0.90	1.61		3.14		6.70	
	10.00	3.00	13.00		0.75	0.75	1.62		3.12		6.75	
1633	7.74	1.06	8.80		2.78	1.03	2.05		5.86		8.25	
	8.00	2.00	10.00		3.00	1.00	2.00		6.00		7.00	
1591	8.08	2.14	10.22		1.08	1.10	1.92		4.10		2.35	
1643	7.18	2.02	9.20		1.02	1.01	1.99		4.02		2.88	
	8.00	2.00	10.00		1.00	1.00	2.00		4.00		2.00	
1714											51.68	1.16
											48.00	

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
	Armour Fertilizer Works, Los Angeles—Continued.		
1501*	Tankage	W. T. Henderson, Riverside	30.10
	Guaranteed		27.40
1516*	Tankage	R. T. Murrell, Pomona	26.83
	Guaranteed		27.50
1548*	Tankage	G. W. Russel, Ontario	28.04
	Guaranteed		27.70
1691*	Tankage	P. B. Goethals, Riverside	27.51
	Guaranteed		27.80
	Balfour, Guthrie & Co., San Francisco.		
1492	Nitrate of Soda	Sparr Fruit Co., Los Angeles	55.51
	Guaranteed		52.50
1533*	Thomas Phosphate Powder	C. C. Chapman, Fullerton	18.46
	Guaranteed		17.86
	F. W. Braun, Los Angeles.		
1704	Sulfate of Potash	A. H. Johnson, Monrovia	59.47
	Guaranteed		54.00
	California Fertilizer Works, San Francisco.		
1484	Bone, Blood, and Potash	M. C. Kelley, San Dimas	38.71
	Guaranteed		39.13
1676*	Bone Meal	C. C. Morse Co., San Francisco	23.23
	Guaranteed		25.25
1694*	Bone Meal	D. F. Breuner, Claremont	24.99
	Guaranteed		25.05
1557	Fruit and Vine	A. C. Dungan, Exeter	27.68
1558	do	do	26.19
	Guaranteed		27.03
1689	Fruit, Orange, and Vine	Vosburg & Williams, Porterville	23.74
	Guaranteed		27.10
1559	Lemon Tree "M"	R. B. Montgomery, Lemon Cove	27.10
1561	do	T. A. Pogue, Lemon Cove	26.04
	Guaranteed		26.95
1616	Muriate of Potash	B. A. Towne, Lodi	62.01
	Guaranteed		56.64
1554	Orange Tree	J. E. Coombs, Lindsay	27.99
	Guaranteed		27.45
1560	Orange Tree "B"	A. R. Carney, Exeter	27.08
1617	do	W. W. Hinsey, Fair Faks	27.12
	Guaranteed		27.28
1524	Peach	T. Putnam, Cupertino	25.64
	Guaranteed		26.90
1623	Special	H. Postlethwaite, Jan José	31.10
1624	do	do	31.03
	Guaranteed		32.18
1625	Special	H. Postlethwaite, San José	33.70
	Guaranteed		31.50
1690	Special	Vosburg & Williams, Porterville	28.17
	Guaranteed		29.95
1556	Special Fruit and Vine	J. E. Coombs, Lindsay	28.36
	Guaranteed		29.13
1687	Special Nursery Stock	Fred A. Browne, Pomona	25.47
	Guaranteed		28.50

*1501—65 per cent fine.

*1516—68 per cent fine.

*1548—64 per cent fine.

*1691—67 per cent fine.

*1533—77 per cent fine.

*1676—55 per cent fine.

*1694—56 per cent fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.												Chlorin
	PHOSPHORIC ACID.				NITROGEN.					POTASH.			
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammo- nia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulfate	Total	
1501			11.31	Bn			5.66	Bl, Bn	5.66				
			11.00				5.00		5.00				
1516			11.15				4.79		4.79				
			11.00				5.00		5.00				
1548			12.38				4.80		4.80				
			11.00			5.00	5.00		5.00				
1691			11.78			4.76	4.76		4.76				
			11.00			5.00	5.00		5.00				
1492					15.86				15.86				
					15.00				15.00				
1533			19.64										
			19.00										
1704											49.56		
											45.00		
1484			21.00				3.15		3.15		7.53		
			17.60				3.30		3.30		9.60		
1676			19.60				2.04		2.04				
			20.00				2.50		2.50				
1694			22.00				2.04		2.04				
			20.00				2.50		2.50				
1557	5.69	3.89	9.58		0.54	0.45	1.40		2.39		8.16		
1558	5.83	3.67	9.50		0.72	0.53	1.10		2.35		7.10		0.66
	6.00	3.00	9.00	Super, Bn	0.50		2.00	Bl, Bn, T	2.50		7.15		
1689	5.02	2.65	7.67	Bn, Super	1.04	0.27	0.83		2.14		7.05		0.72
	6.00	3.50	9.50		0.50		2.00	Bl, Bn, T	2.50		7.00		
1559	8.31	3.90	12.21				1.70		1.70		6.98		0.68
1561	6.66	5.27	11.93				1.66		1.66		7.31		0.68
	8.50	3.50	12.00	Super			1.65	Bl, Bn	1.65		7.00		
1616											51.68		
											47.20		
1554	5.17	3.61	8.78				2.95		2.95		6.81		
	6.50	2.50	9.00	Super			2.50	Bl, Bn, T	2.50		7.00		
1560	5.69	2.74	8.43			1.00	0.61		1.61		10.70		0.80
1617	4.38	7.95	12.33			0.76	1.05		1.81		9.12		0.80
	6.50	2.50	9.00	Super		0.82	0.82	Bl, Bn	1.65		10.00		
1524	6.01	2.44	8.45		0.72	0.35	1.23		2.30		7.09		
	6.00	2.50	8.50	Bn, Super	0.50		2.00	Bl, Bn, T	2.50		7.25		
1623	8.42	5.08	13.50		0.55	0.62	1.93		3.10		5.49		
1624	7.99	5.91	13.90		0.41	0.70	2.02		3.13		5.38		
	11.00	3.00	14.00	Bn, Super			2.87	Bl, Bn	2.87		5.00		
1625	7.11	7.87	14.98		0.45	0.42	1.57		2.44		9.87		
	5.00	9.00	14.50	Bn, Super			2.25	Bn	2.25		10.00		
1690	4.87	2.48	7.35		0.95	0.33	0.94		2.22		10.68		0.72
	6.00	2.00	8.00	Bn, Super	0.50		2.00	Bl, Bn	2.50		10.00		
1556	4.45	4.10	8.55		0.98	0.84	1.25		3.07		7.93		0.80
	6.00	3.00	9.00	Bn, Super	1.10		2.00	Bl, Bn	3.10		7.15		
1687	7.72	2.23	9.95		1.65	0.26	1.29		3.20		2.68		
	8.00	2.00	10.00	Super	1.00		3.00	Bn, T	4.00		2.00		

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
	Hauser Packing Co., Los Angeles, Cal.		
1534	Blood	C. C. Chapman, Fullerton	49.35
	Sold on Station analyses.		
1535*	Tankage	C. C. Chapman, Fullerton	30.19
	Sold on Station analyses.		
	Hawaiian Fertilizer Co., San Francisco.		
1648	Nitrate of Soda	M. Braughler, Santa Rosa	53.23
	Guaranteed		63.00
1502*	Special	E. C. Mayo, Santa Rosa	23.81
	Guaranteed		22.16
1645*	Special	M. Braughler, Santa Rosa	26.98
	Guaranteed		30.40
1646*	Special	M. Braughler, Santa Rosa	33.75
	Guaranteed		41.04
1647*	Special	M. Braughler, Santa Rosa	21.26
	Guaranteed		21.60
1526	Superphosphate	Koerbel Bros., Guerneville	20.66
	Guaranteed		19.20
	Morris & Co., Chicago, Ill.		
1471	Blood	Arlington Heights Fruit Co., Riv'side	56.57
	Guaranteed		54.60
1477	Blood	Arlington Heights Fruit Co., Riv'side	58.34
1478	do	do	56.62
1479	do	do	56.36
1485	do	do	57.58
1486	do	do	57.79
1487	do	do	57.37
1488	do	do	57.45
1489	do	do	57.33
1490	do	do	56.49
1507	do	do	58.21
1508	do	do	57.97
1509	do	do	59.39
1510	do	do	58.97
1511	do	do	58.34
1609	do	do	57.79
	Guaranteed		58.80
1701	Blood	Arlington Heights Fruit Co., Riv'side	58.16
1702	do	do	58.12
	Sold on Station analyses.		
1512*	Pacific Big 2	Bollinger & Mellor, Riverside	31.59
	Guaranteed		31.85
1649*	Pacific Big 2	Benchley Fruit Co., Fullerton	31.85
	Guaranteed		32.00
1513*	Pacific Big 4	Bollinger & Mellor, Riverside	43.23
	Guaranteed		43.20
1514*	Pacific Big 4	Bollinger & Mellor, Riverside	43.67
1536*	do	C. C. Chapman, Fullerton	42.45
	Guaranteed		43.41

*1535—56 per cent fine.

*1502—Potash present as muriate.

*1645—Potash present as muriate.

*1646—Shrimp shells, 61 per cent fine; some hoof.

*1647—Should be labeled superphosphate.

*1512—73 per cent fine.

*1649—72 per cent fine, some hoof.

*1513—81 per cent fine, some hoof.

*1514—82 per cent fine, some hoof.

*1536—83 per cent fine, some hoof.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.												Chlorin
	PHOSPHORIC ACID.				NITROGEN.					POTASH.			
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammoniacal Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulfate	Total	
1534							11.75		11.75				
1535			16.92				4.61		4.61				
1648					15.21				15.21				
1502	7.55 8.00	0.51	8.06						18.00 1.97		6.87		5.74
1645	6.51 8.00	0.51	7.02	Bn, Super			2.18 4.00	Bn, G. T	2.18 4.00		6.00 8.49		4.96
1646			9.39 9.00	Fs			6.98 9.00	Fs	6.98 9.00		4.00		
1647	17.72 18.00	0.52	18.24										
1526	17.22 16.00	0.46 2.00	17.68 18.00										
1471							13.47 13.00		13.47 13.00				
1477							13.89		13.89				
1478							13.48		13.48				
1479							13.42		13.42				
1485							13.71		13.71				
1486							13.76		13.76				
1487							13.66		13.66				
1488							13.68		13.68				
1489							13.65		13.65				
1490							13.45		13.45				
1507							13.86		13.86				
1508							13.80		13.80				
1509							14.14		14.14				
1510							14.04		14.04				
1511							13.89		13.89				
1609							13.76		13.76				
1701							14.00		14.00				
1702							13.86		13.86				
							13.85		13.85				
1512			27.06 28.00	Bn			2.63 2.50	Bn	2.63 2.50				
1649			27.34 28.00	Bn			2.60 2.50	Bn	2.60 2.50				
1513			4.40 5.50	T			10.13 9.90	T	10.13 9.90				
1514			4.35				10.20		10.20				
1536			4.85 5.50				9.79 9.90		9.79 9.90				

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
Morris & Co., Chicago—Continued.			
1650*	Pacific Big 4	Benchley Fruit Co., Fullerton	41.91
	Guaranteed		43.60
1651*	Pacific Big 4	Benchley Fruit Co., Fullerton	43.50
	Guaranteed		44.00
1652*	Pacific Big 4	F. M. Baird, Corona	42.74
1653*	do	do	42.22
	Guaranteed		43.21
1637*	Pacific Big 7	Colton Hardware Co., Colton	40.36
	Guaranteed		39.07
1638*	Pacific Big 7	Colton Hardware Co., Colton	37.66
	Guaranteed		38.70
1654*	Pacific Big 7	F. M. Baird, Corona	39.13
	Guaranteed		38.91
1655*	Pacific Big 8	F. M. Baird, Corona	34.08
	Guaranteed		33.94
Mountain Copper Co., San Francisco.			
1503	Mixed Fertilizer	N. W. Hawkinson, Upland	27.12
	Guaranteed		24.00
1531	Mixed Fertilizer	W. A. Freemire, Pomona	32.03
	Guaranteed		31.72
1553	Mixed Fertilizer	Dr. J. L. Hardeman, Porterville	26.87
	Guaranteed		26.64
1574	Mixed Fertilizer	T. A. Pogue, Lindsay	24.08
1593	do	Wm. Pierson, Lindsay	23.82
	Guaranteed		24.00
1592	Mixed Fertilizer	Wm. Pierson, Lindsay	30.81
1656	do		33.51
	Guaranteed		31.72
1594	Mixed Fertilizer	Wm. Pierson, Lindsay	29.53
	Guaranteed		28.71
1632	Mixed Fertilizer	H. J. Nichols, Pomona	33.21
	Guaranteed		31.44
1692	Mixed Fertilizer	Vosburgh & Williams, Porterville	21.04
	Guaranteed		19.45
1658	Mixed Fertilizer	C. W. Cozzens, Fair Oaks	32.92
	Guaranteed		31.55
1657	Mixed Fertilizer	Silva & Bergtholdt, Newcastle	25.59
	Guaranteed		24.95
1659	Mixed Fertilizer	C. W. Cozzens, Fair Oaks	21.02
	Guaranteed		19.20
1677	Mixed Fertilizer	Union Commis'n Co., Santa Barbara	24.43
	Guaranteed		21.95
1679	Mixed Fertilizer	Union Commis'n Co., Santa Barbara	18.02
	Guaranteed		16.20
1575	Superphosphate	Kaweah Lemon Co., Lemon Cove	7.90
1661	do	Chas. Kew estate, Chico	8.29
	Guaranteed		6.00
1572	Superphosphate, Black	T. A. Pogue, Lindsay	20.53
	Guaranteed		20.46
1660	Superphosphate, Black	Chas. Kew estate, Chico	21.96
1678	do	Union Commis'n Co., Santa Barbara	22.20
	Guaranteed		20.64
1504	Superphosphate, Medium	N. W. Hawkinson, Upland	25.34
	Guaranteed		22.62

*1650—85 per cent fine.

*1651—88 per cent fine.

*1652—83 per cent fine.

*1653—80 per cent fine.

*1637—85 per cent fine.

*1638—81 per cent fine.

*1654—82 per cent fine.

*1655—Some hoof.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.												Chlorin	
	PHOSPHORIC ACID.				NITROGEN.					POTASH.				Total
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates.	In Ammo- nia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulfate			
1650			5.91	T			9.39	T	9.39					
			5.50						9.90		9.90			
1651			4.57	T			9.96	T	9.96					
			5.50						9.90		9.90			
1652			4.91				9.90		9.90					
1653			4.95				9.76		9.76					
			5.50	T			9.90	T	9.90					
1637			7.74				8.63		8.63					
			8.00	T			8.25	T	8.25					
1638			10.77				7.41		7.41					
			8.00	T			8.25	T	8.25					
1654			8.87				8.13		8.13					
			8.00	T			8.25	T	8.25					
1655			24.58	Bn			2.42	Bn	2.42		4.72			
			25.00				2.47			2.47		4.00		
1503	13.39	0.69	14.08	Super	2.13	0.08	1.20	Whale G	3.41		9.21			
	12.00	1.00	13.00											
1531	11.53	0.43	11.96	Super	2.67	0.40	1.33	Bat G, T	4.00		4.52			
	10.00	0.50	10.50											
1553	10.40	0.29	10.69	Super	2.67				4.01					
	10.00	0.50	10.50											
1574	12.99	0.41	13.40								7.08			
1593	12.65	0.33	12.98								7.20			
	12.00	1.00	13.00								8.00			
1592	10.40	0.20	10.60		3.11	0.32	0.33		3.76		4.07			
1656	10.29	0.27	10.56		2.80		1.39		4.19		4.72			
	10.00	0.50	10.50	Super	2.67		1.33	Whale G	4.00		4.00			
1594	10.68	0.19	10.87	Super	3.34	0.31	0.33	Bat G, T	3.98		2.07			
	10.00	0.50	10.50											
1632	10.56	0.46	11.02	Super	3.46	0.35	0.31	Bat G, T	4.12		4.75			
	10.00	0.50	10.50											
1692	13.66	0.22	13.88	Super	2.67						3.78			
	12.00	0.50	12.50								4.00			
1658	10.49	0.48	10.97	Super	2.94		0.98	Bl, T	3.92		4.90			
	10.00	0.50	10.50											
1637	10.43	0.29	10.72	Super	1.20		0.45	Whale G	1.65		5.77			
	10.00	0.50	10.50											
1659	13.40	0.61	14.01								4.12			
	12.00	0.50	12.50								4.00			
1677	13.15	0.71	13.86	Super	1.16		0.42	Bl, T	1.58		2.13			
	12.00	0.50	12.50											
1679	13.39	0.65	14.04								1.63			
	12.00	0.50	12.50								1.50			
1575	6.58	0.55	7.13											
1661	6.91	0.83	7.74	Super										
	5.00	0.20	5.20											
1572	17.08	0.24	17.32											
	17.03	0.85	17.88											
1660	18.30	0.32	18.62											
1678	18.50	0.34	18.89											
	17.20	0.60	17.80											
1504	21.12	0.32	21.44											
	18.85	0.75	19.60											

ANALYSES AND VALUATIONS—Continued.

Laboratory Number -----	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices -----
	Mountain Copper Co., San Francisco—Continued.		
1515	Superphosphate, Medium -----	J. E. Adamson, Pomona -----	22.63
1573	do -----	Kaweah Lemon Co, Lemon Cove -----	22.60
	Guaranteed -----		22.04
1703	Superphosphate, Medium -----	A. H. Johnson, Monrovia -----	22.55
	Guaranteed -----		22.12
	Oakland Meat and Packing Co., Oakland.		
1466*	Tankage -----	W. Grant, Vacaville -----	31.11
	Guaranteed -----		36.88
	Pacific Bone, Coal, and Fertilizing Co., San Francisco.		
1562	Citrona -----	W. A. Berry, Lindsay -----	31.74
1563	do -----	Burr Bros., Lindsay -----	31.56
1564	do -----	F. W. Young, Lindsay -----	33.77
	Guaranteed -----		29.55
1551	Nitrate of Soda -----	W. E. Porter, Lindsay -----	54.14
	Guaranteed -----		52.50
1565	Pomona -----	A. L. Lewis, Lindsay -----	32.48
	Guaranteed -----		30.45
1626	Pomona -----	H. Elphick, Sebastopol -----	31.27
1627	do -----	D. Sinclair, Sebastopol -----	32.81
	Guaranteed -----		29.95
1566	Special -----	W. E. Porter, Lindsay -----	34.62
	Guaranteed -----		32.55
1567	Special -----	A. L. Lewis, Lindsay -----	30.04
	Guaranteed -----		26.90
1568	Special -----	L. S. White, San José -----	32.77
	Guaranteed -----		32.80
1569	Special -----	Burr Bros., Lindsay -----	34.58
	Guaranteed -----		32.48
1570	Special -----	W. E. Wilson, Exeter -----	38.78
	Guaranteed -----		36.08
1571	Special -----	W. E. Wilson, Exeter -----	35.79
	Guaranteed -----		32.55
1618	Special -----	Penryn Fruit Co., Penryn -----	29.79
	Guaranteed -----		26.30
1662	Special -----	Thompson, Beard & Son, Napa -----	25.97
	Guaranteed -----		22.99
	Pacific Guano and Fertilizer Co., San Francisco.		
1491	Blood -----	H. C. Rumohr, Redlands -----	52.92
	Guaranteed -----		54.60
1474*	Fruit and Vine -----	Geo. S. Gay, Craftonville -----	30.78
1595*	do -----	Consumers Ice Co., Fresno -----	29.68
	Guaranteed -----		29.00
1596	Lawn Dressing -----	Consumers Ice Co., Fresno -----	32.46
1664	do -----	G. P. McNear, Petaluma -----	33.98
	Guaranteed -----		30.50
1480	Nitrate of Soda -----	H. C. Rumohr, Redlands -----	56.11
	Guaranteed -----		52.50
1473*	Nursery Stock -----	Mrs. A. Marlett, Mentone -----	30.88

*1466—71 per cent fine.

*1595—Shrimp shells.

*1473—Shrimp shells.

*1474—Some hoof.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.												Chlorin -----
	PHOSPHORIC ACID.				NITROGEN.					POTASH.			
	Available	Insoluble	Total -----	Guaranteed as Derived From -----	In Nitrates	In Ammonia Salts	Organic -----	Organic Nitrogen Guaranteed as Derived From	Total -----	From Muriate	From Sulfate	Total -----	
1515	18.86	0.32	19.18										
1573	18.33	0.34	18.66										
	18.37	0.70	19.07										
1703	18.79	0.29	19.08										
	18.43	0.33	18.76										
1466			12.15				5.57		5.57				
			12.50				7.00		7.00				
1562	7.84	3.36	11.20		1.51		1.71		3.22		7.11		0.50
1563	8.05	2.64	10.69		1.55		1.64		3.19		7.17		0.52
1564	8.93	3.51	12.44		1.59		1.71		3.30		7.41		
	7.00	3.00	10.00	Bn, Super	1.50		1.50	Bl, Bn, T	3.00		7.00		
1551					15.47				15.47				
					15.00				15.00				
1565	7.22	1.68	8.90		1.63		1.43		3.06		9.62		0.68
	6.00	2.00	8.00		1.50		1.25		2.75		10.00		
1626	8.74	0.38	9.12		1.59	1.28			2.87		8.69		0.78
1627	8.63	0.40	9.03		1.80	1.26			3.06		9.51		0.90
	6.00	2.00	8.00	Super	1.50	1.25			2.75		10.00		
1566	7.25	4.08	11.33		2.36		1.70		4.06		7.35		
	6.00	4.30	10.30	Bn, Super	2.40		1.60	Bn,	4.00		7.00		
1567	8.43	1.61	10.04		0.67		0.93		1.60		10.88		0.72
	7.50	1.50	9.00	Bn, Super	0.75		0.63	Bl, Bn, T	1.38		10.00		
1568	6.77	6.02	12.79		2.40		1.98		4.38		4.41		
	7.00	4.80	11.80	Bn, Super	2.40		2.20	Bl, Bn, T	4.60		4.00		
1569	5.97	4.39	10.36		2.33		1.87		4.20		7.98		
	6.00	4.00	10.00	Bn, Super	2.25		1.75	Bl, Bn, T	4.00		7.00		
1570			18.14				2.63		2.63		11.46		
			18.00				2.30	Bn,	2.30		10.40		
1571	5.87	6.29	12.16	Bn	1.52	0.15	1.61		3.28		11.08		
	6.00	3.40	9.40	Bn, Super	1.50		1.60	Bl, Bn, T	3.10		10.00		
1618	8.03	3.73	11.76		1.10		1.22		2.32		7.96		
	7.67			Bn, Super	1.00		1.00	Bl, Bn, T	2.00		8.00		
1662			9.10		1.69	0.09	0.58		2.36		8.44		0.74
			7.67	Bn, Super	1.50		0.50	Bl, Bn, T	2.00		8.00		
1491							12.60		12.60				
							13.00		13.00				
1474	7.42	5.26	12.68		0.54		2.31		2.85		6.76		
1595	7.02	3.29	10.31		0.58		2.52		3.10		6.25		1.44
	8.00	2.50	10.50	Bn, Super	0.50		2.00	Bl, Bn	2.50		7.00		
1596	11.08	0.28	11.36			3.59			3.59		5.09		
1664	10.31	0.20	10.51			4.25			4.25		5.17		
	8.00	1.00	9.00	Super		4.00			4.00		5.00		
1480					16.03				16.03				
					15.00				15.00				
1473	7.95	4.52	12.47		1.02	0.14	3.09		4.25		2.20		

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
Pacific Guano & Fertilizer Co., San Francisco.—Continued.			
1475*	Nursery Stock	M. Geslar, Redlands	30.62
1482*	do	H. C. Rumohr, Redlands	29.72
1496*	do	do	30.71
	Guaranteed		29.50
1597	Special Phosphoric Acid and Potash	Consumers Ice Co., Fresno	26.47
	Guaranteed		25.20
1494	Sulphate of Potash	H. C. Rumohr, Redlands	59.50
	Guaranteed		58.80
1663	Vegetable Grower	G. P. McNear, Petaluma	38.75
	Guaranteed		39.80
Redlands Fruit Association, Redlands.			
1580	Blood	Redlands Fruit Ass'n, Redlands	57.32
1681	do	do	57.19
	Guaranteed		57.07
1682*	Bone Meal	Redlands Fruit Ass'n, Redlands	30.65
	Guaranteed		31.15
1578*	Tankage	Redlands Fruit Ass'n, Redlands	27.22
	Guaranteed		29.40
1579*	Tankage	Redlands Fruit Ass'n, Redlands	27.63
	Guaranteed		29.10
1680*	Tankage	Redlands Fruit Ass'n, Redlands	26.58
	Guaranteed		28.30
1683*	Tankage	Redlands Fruit Ass'n, Redlands	28.71
	Guaranteed		28.20
Carroll B. Smith, Redlands, Cal.			
1528	Bat Guano	Wright Bros., Riverside	22.20
1529	do	do	21.66
	Sold on Station analysis.		
1493	Nitrate of Soda	E. L. Koethen, Riverside	55.89
1665	do	C. B. Smith, Redlands	53.93
	Guaranteed		52.50
1600	Special	C. B. Smith, Redlands	36.02
	Guaranteed		32.50
1601*	Tankage	C. B. Smith, Redlands	30.70
	Guaranteed		30.40
1639*	Tankage	L. C. Waite	33.40
	Guaranteed		32.94
Swift & Co., Chicago.			
1598*	Diamond "E"	C. B. Smith, Redlands	33.50
	Guaranteed		34.27
1700*	Diamond "E"	E. L. Koethen, Riverside	33.98
	Guaranteed		34.17
1495*	Special Bone Meal	E. L. Koethen	30.31
	Guaranteed		24.62
Union Fertilizer Co., Los Angeles, Cal.			
1472	Blood	Arlington Heights Fruit Co., Riv'side	50.61
	Guaranteed		50.40

*1475—Shrimp shells.

*1482—Shrimp shells.

*1496—Shrimp shells.

*1682—51 per cent fine.

*1578—66 per cent fine.

*1579—60 per cent fine.

*1680—60 per cent fine.

*1683—58 per cent fine.

*1601—54 per cent fine.

*1639—77 per cent fine.

*1598—74 per cent fine.

*1700—72 per cent fine.

*1495—53 per cent fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.													Chlorin
	PHOSPHORIC ACID.				NITROGEN.					POTASH.				
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammonia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulfate	Total		
1475	8.80	4.06	12.86		1.11	0.15	2.71		3.97		2.30			
1482	8.61	2.70	11.31		1.20	0.17	2.53		3.90		2.59		1.78	
1496	8.41	3.10	11.51	Bn, Super	1.24		2.75		3.99		3.11		2.00	
	8.00	4.00	12.00	Bn, Super	1.00		3.00	Bl, Bn, Fs	4.00		2.00			
1597	13.32	2.76	16.08								8.74		0.64	
	12.00	1.00	13.00								9.00			
1494											49.58		1.31	
											49.00			
1663	9.85	1.72	11.57	Bn, Super		2.45	1.54		3.99		9.24		0.68	
	10.00	2.00	12.00					Bn	4.00		9.00			
1580							13.98		13.98					
1681							13.95		13.95					
							13.92		13.92					
1682			27.56	Bn, Super			2.35		2.35					
			27.50				2.50		2.50					
1578			11.80				4.68		4.68					
			13.00				5.00		5.00					
1579			11.25				4.98		4.98					
			13.00				5.00		5.00					
1680			11.59				4.63		4.63					
			12.00				5.00		5.00					
1683			12.22				5.09		5.09					
			12.00				5.00		5.00					
1528			7.82						3.89					
1529			8.85						3.60					
1493					15.97				15.97					
1665					15.41				15.41					
					15.00				15.00					
1600			10.23				5.22		5.22		5.37		0.62	
			12.00	T			5.00	T	5.00		2.00			
1601			16.16				4.83		4.83					
			15.00				5.00		5.00					
1639			8.75				6.77		6.77					
			9.00				6.60		6.60					
1598			20.16				4.50		4.50					
			19.00	Bn,			4.94	Bn,	4.94					
1700			18.86				4.92		4.92					
			19.00	Bn,			4.94	Bn,	4.94					
1495			30.62				1.58		1.58					
			27.00				0.82		0.82					
1472							12.05		12.05					
							12.00		12.00					

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
Union Fertilizer Company, Los Angeles, Cal.—Continued.			
1542*	Bone Meal	E. E. Cole, Redlands	29.33
	Guaranteed		27.19
1710*	Bone Meal	U. L. May, Rialto	29.31
	Guaranteed		27.34
1577	Fruiting	Alex Hudson, Riverside	24.45
1602	do	E. E. Cole, Redlands	27.03
1603	do	J. C. Smith, Colton	27.11
1666	do	O. H. Stanton, North Cucamonga	26.18
	Guaranteed		24.13
1540	Nitrate of Soda	E. E. Cole, Redlands	54.46
1541	do	J. F. Jackson, Riverside	54.74
	Guaranteed		52.50
1523	Nursery	E. E. Cole, Redlands	27.73
	Guaranteed		28.85
1605	Special	E. E. Cole, Redlands	53.86
	Guaranteed		57.60
1696*	Special	E. B. Clark, Pomona	36.28
	Guaranteed		34.80
1604	Special Fruiting	E. E. Cole, Redlands	29.78
	Guaranteed		29.75
1606	Sulfate of Potash	E. E. Cole, Redlands	57.89
	Guaranteed		54.00
1530	Superphosphate	Wright Bros., Riverside	21.30
	Sold on Station analysis		
1607*	Tankage	J. F. Jackson, Riverside	31.71
	Guaranteed		32.96
1608*	Tankage	J. C. Smith, Colton	33.83
	Guaranteed		32.85
1667*	Tankage	N. L. May, Rialto	32.47
	Guaranteed		32.50
1668*	Tankage	J. F. Jackson, Riverside	33.54
	Guaranteed		32.85
1711*	Tankage	N. L. May, Rialto	35.57
	Guaranteed		33.43
Union Superphosphate Company, San Francisco, Cal.			
1620	Superphosphate	G. R. Couper, Lodi	20.75
1669	do	Pioneer Fruit Co., Newcastle	20.64
	Guaranteed		21.00
1684	Superphosphate	S. W. Reed, Modesto	18.42
	Guaranteed		14.40
Woodbridge Chemical Works, Los Angeles, Cal.			
1670	Nitrate of Soda	J. H. Reynolds, Redlands	53.76
	Guaranteed		52.50
1671	Nursery	J. H. Reynolds, Redlands	30.09
	Guaranteed		28.80

*1542—41 per cent fine.

*1710—47 per cent fine.

*1696—Some hoof.

*1607—68 per cent fine.

*1608—67 per cent fine.

*1667—60 per cent fine.

*1668—67 per cent fine.

*1711—78 per cent fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.....	POUNDS PER HUNDRED.												Chlorin.....
	PHOSPHORIC ACID.				NITROGEN.				POTASH.				
	Available	Insoluble	Total	Guaranteed as Derived From.....	In Nitrates	In Ammo- nia Salts..	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulfate	Total	
1542			23.68				2.92		2.92				
			23.00				2.47		2.47				
1710			23.60				2.88		2.88				
			23.00				2.47		2.47				
1577	4.70	6.63	11.33		0.41	0.46	2.22		3.09		2.93		0.66
1602	6.81	4.99	11.80		0.54	0.55	2.09		3.18		3.44		
1603	6.58	6.69	13.27		0.72	0.25	2.17		3.14		3.14		
1666	6.48	7.37	13.85	Bn.	1.29	0.22	1.46		2.97		2.97		0.68
	7.00	1.50	8.50	Super	0.75	0.60	1.65	Bn, G, T	3.00		3.00		
1540					15.56				15.56				
1541					15.64				15.64				
					15.00				15.00				
1523	5.05	2.62	7.67	Bn.	0.65	0.75	3.37		4.77		1.58		
	6.00	1.50	7.50	Super	1.00	1.00	3.00	Bn, G, T	5.00		1.50		
1605			5.21	Bn.	6.51	0.96	5.29		12.76		1.91		
			5.50	Super				Bn, G, T	13.00		1.00		
1696			15.48				4.80		4.80		3.92		
			15.00	Bn.			4.50	Bl, Bn, T	4.50		4.00		
1604	5.17	6.86	12.03	Bn.	0.50	0.68	2.91		4.09		3.59		1.00
	8.00	1.50	9.50	Super	1.00	0.75	2.25	Bn, G, T	4.00		3.50		
1606											48.24		2.06
											45.00		
1530	17.75	0.79	18.54										
1607			12.85				5.61		5.61				
			13.75				5.75		5.75				
1608			13.79				6.00		6.00				
			13.75				5.75		5.75				
1667			12.91				5.92		5.92				
			13.75				5.75		5.75				
1668			12.81				6.13		6.13				
			13.75				5.75		5.75				
1711			19.60				5.10		5.10				
			13.75				5.75		5.75				
1620	17.29	0.75	18.04										
1669	17.20	1.48	18.68										
	17.50												
1684	15.35	2.83	18.18										
	12.00	3.00	15.00										
1670					15.36				15.36				
					15.00				15.00				
1671			8.31	Bn.	3.39		2.16		5.55		2.44		
			8.00	Super				Bl, Bn, G	5.00		2.00		

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.....	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per ton at Station Prices.....
	Woodbridge Fertilizer Company, San Bernardino, Cal.		
1611	Nitrate of Soda ----- Guaranteed -----	Los Angeles Olive Growers' As'n, L. A.	55.05 52.50
1672	Onion ----- Guaranteed -----	Factory, San Bernardino -----	31.61 32.15
1599	Orange and Lemon No. 1 ----- Guaranteed -----	J. H. Reynolds, Redlands -----	35.21 29.50
1576	Special ----- Guaranteed -----	E. Robertson, Redlands -----	22.19 20.40
1674	Special ----- Guaranteed -----	Factory, San Bernardino -----	25.16 23.30
1612	Sulfate of Potash ----- Guaranteed -----	Los Angeles Olive Growers' As'n, L. A.	59.42 58.80
1673	Superphosphate ----- Guaranteed -----	Factory, San Bernardino -----	21.18 20.40
1613*	Woodbridge Special Fertilizer ----- Guaranteed -----	Los Angeles Olive Growers' As'n, L. A.	32.62 32.00
1686*	Woodbridge Special Fertilizer ----- Guaranteed -----	Fair Oaks Park Co., Los Angeles -----	26.85 17.36

*1613—62 per cent fine. Should be classified as tankage.

*1686—61 per cent fine. Should be classified as bone.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.													Chlorine
	PHOSPHORIC ACID.				NITROGEN.					POTASH.				
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammonia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulfate	Total		
1611					15.73				15.73					
1672	3.18	6.44	9.62		15.00				15.00					
1599	5.00	5.00	10.00	Bn, Super	1.99		1.77		3.76		8.77			
1599	6.58	5.73	12.31		1.50		2.50		4.00		7.00			
1576	5.00	5.00	10.00	Bn	1.56		3.65	Bl, Bn, G	5.21		3.65			
1576			9.80		2.00		2.00			4.00		5.00		0.74
1674			8.00	Bn, Super	0.47		1.55		2.02		5.42			
1674			10.85		3.05				2.00		5.00			
1612			10.00	Super	3.00				3.05		4.84			
1612									3.00		4.00			
1673	17.65	0.57	18.22								49.52		1.18	
1673	17.00		17.00								49.00			
1613			15.03				5.15		5.15					
1613			15.00	Bn			5.00	Bl, Bn	5.00					
1686			22.10				2.44		2.44					
1686			17.06	Bn			1.00	Bn	1.00					

